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Gender Selection: A Position Statement

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Abstract
Gender selection is the ability to choose a girl or a boy before you get pregnant. Some methods are used to assist in changing the odds towards the gender being selected. Methods such as selective abortion and infanticide resulted in birth ratios as high as 130 males per 100 females in some countries. Gender selection is surrounded with many debates. The purpose of this position statement is to present opponents and proponents' viewpoints regarding gender selection. More to be done in this regard such as: the decisiveness of couples and physicians in issues related to gender selection; centers providing gender selection must keep a balanced gender ratio within the center; gender selection should only be done after proper informative and implicative counseling about many issues such as how to use healthy embryos of the unwanted gender in research, or their donation to infertile couples, or their transfer to the genetic mother.
Keywords: gender selection, position statement, proponents, opponents

1. Introduction

Gender selection is debated since many years (Gadit, 2012). Gender selection is the ability to choose a girl or a boy before you get pregnant, and refers to the utilization of medical techniques to choose the gender of the fetus (Weiss, 2014). Gender selection is associated with the proliferation of technologies, such as prenatal ultrasound and fetal termination, which help couples to give birth to a child of a preferred gender for medical, personal, cultural, or economic reasons (Thiele & Leier, 2010).

There are three core motives for engaging in gender selection (World Health Organization [WHO], 2011). These are 1) medical reasons: such as preventing the birth of children affected or at risk of gender-linked disorders; 2) family balancing reasons: where couples choose to have a child of one gender because they already have one or more child of the other gender; and 3) gender preference reasons: often in favor of male from cultural, social and economic reasons, and as a result of policies requiring couples to limit reproduction to one child, as in China.

At present, it is possible to select the gender of a baby by two common methods: 1) Separating the X and Y chromosome bearing sperms using Micro Sort TM sperm separation (Serour, 2004), and 2) Preimplantation Genetic Diagnosis (PGD) (Serour, 2004). The natural gender ratio at birth ranges from 102 to 106 males per 100 females (WHO, 2011). However, gender selection had resulted in birth ratios as high as 130 males per 100 females (WHO, 2011). In addition, in the United States of America (USA), 90% of couples reported engaging in gender selection via sperm sorting for family balancing and 80% of those couples desired girls (WHO, 2011).

Position statement is a brief, concise statement developed by experts, convened to review the research literature for the purpose of advancing the understanding of a given topic. It consists of substantive information and policies regarding a particular topic. Also, it represents the collective opinions of experts across countries (Ingravallo, Dietrich, Gilja & Piscaglia, 2014). Therefore, the purpose of this position statement is to present opponents and proponents' viewpoints regarding gender selection.

2. Background

Gender selection is considered a sexual discrimination and prejudice, and one of its unwanted effects is gender imbalance (WHO, 2011; 2012). The purpose of this literature review is pinpoint different opponents and proponents' positions regarding gender selection.

From population's perspectives, 58% of respondents in Germany did not express a preference about the gender of their offspring, 30% desired a family with an equal number of boys and girls, 4% would prefer more boys than girls, 3% more girls than boys, and 1% each for exclusively boys or girls only (WHO, 2011). About 92% of those which used Micro Sort process attempting for a girl do conceive a girl, while the success rate for gender selection of a boy using Micro Sort is lower at 81% (Weiss, 2014).

From physician's perspectives, in a survey of obstetrician-gynecologists in USA, 64% of them would help the patient to obtain an abortion for the purpose of gender selection (Harris, Cooper, Rasinski, Curlin, & Drapkin, 2011). The majority of units in Finland made fetal gender determination possible during the second-trimester using ultrasonographic screening without medical indication (Jylha, Kirkinen, Puura, & Thomas, 2010).

In Jordan, the estimated population reached six million and 530 thousand people. 48.5% Of them are females; which are equivalent to three million and 164 thousand people (The Department of Statistics, 2013). The Jordanian law bans the use of techniques in determining the gender of the fetus. Paragraph (A) of article (10) prohibits the use of medical technology in selecting the gender of the fetus except in gender-linked genetic diseases (2010). Violents of this law will be punished by imprisonment for not less than one year, and by a fine not less than one thousand dinars and not more than three thousand dinars (Article 19/B, 2010).

2.1 Proponents of Gender Selection

As ethically permissible, the American College of Obstetricians and Gynecologists (2002) accepted the practice of gender selection to prevent gender-linked genetic disorders. Also, gender selection was allowed under these conditions for purposes of family balancing in countries in which no demonstrated pro male gender bias exists among prospective parents (American College of Obstetricians and Gynecologists, 2002). The WHO in "Gender and Genetics" described three core motives for gender selection: 1) prevention of birth of genetically defective child, 2) couple's desire for family balancing or from cultural, social or economic reasons, and 3) the use of sex selection techniques to detect severe gender-linked genetic or other fetal or embryonic disorders, resulting for instance in abortion. The said document also noted that in countries like India and China, gender-selective abortions had resulted in distortions of the natural gender ratio and inappropriate control over non-essential characteristics of children, and had posed psychological burden and harm to gender-selected offspring (WHO, 2012).

In Germany, gender selection for medical reasons was widely regarded as acceptable because it is aimed at avoiding health risks rather than at providing the prospective parents with a child of a specific gender. However, the way in which this distinction is usually drawn seems too strict (Dondorp et al., 2013). Also, many families requested gender selection for family balancing, selecting an embryo that is the opposite gender of one or more of their existing children. The goal is for gender variety in a family, and is frequently motivated by the female partner, and thus is not inherently sexist, as it may be motivated by the desire to rear children of both gender (Leiter, 2014). Therefore, from ethical and legal viewpoints, gender selection to prevent the transmission of serious gender-linked genetic disease is acceptable and recommended (Eftekhaari et al. 2015). There is no argument against medically indicated gender selection: in the American Society for Reproductive Medicine's (ASRM) position statement it was stated that all families have a genuine right to healthy offspring, and they can implement all available technologies to avoid a known genetic disorder. Moreover, in such cases, there is no preference of one gender to another. The ASRM committee advocated the use of PGD for nonmedical gender selection should not be encouraged; however, the committee was not in a favor of its legal prohibition (Ethics Committee of the American Society for Reproductive Medicine, 2004).

More contentious but arguably tolerable is gender selection by a couple with one child, or two or more children of the same gender, who intend to have only one more child, and want it to be of the other gender (Dickens, Serour, Cook, & Qiu, 2005).

From the Islamic viewpoint, some scholars believed that there is nothing wrong with the attempt to fulfill the wish of a married couple to have a boy or a girl through available medical means (Dezhkam, 2014; Serour & Dickens, 2001).

2.2 Opponents of Gender Selection

The strongest objection against gender selection is its discrimination against the birth of a girl child. Gender selection appeared as a symbol and cause of the inferior status of and discrimination against girls, and embodied and perpetuated the devaluation of women from and before birth (Dickens et al., 2005).

In Egypt, gender selection was preferred because the couple confirmed to their parents' preferences (Serour, 2004). This seems an injustice to the child and further reinforces the cultural message that children exist primarily to fulfill the needs of the parents rather than for their own sake. Such an implication is already built into many cultures; which represents an ethical responsibility to fight against. Choosing the gender of child seems incompatible with the attitude of unconditional acceptance that the developmental psychologists have found to be essential to successful parenting (Serour, 2004; Serour & Dickens, 2001). In addition, the majority of German specialists in reproductive medicine oppose preimplantation gender selection for nonmedical reasons (Aghajanova & Valdes, 2012; Wilhelm, Dahl, Alexander, Brahler & Richter, 2013). In Jordan, from an Islamic commitment, the majority of surveyed 600 pregnant women were not in favor of using preconception gender selection. Those who preferred to have boys were with lower education, and those with an imbalanced family were more likely to be interested in using gender selection technology (Al-Akour, Khassawneh, Khader, & Dahl, 2009).

In summary, gender selection is debatable and controversial. The purpose of this literature review was to pinpoint different opponents and proponents' positions regarding gender selection. Gender selection was allowed for family balancing in countries in which no pro-male sex bias existed among prospective parents.

Gender selection was also allowed to detect severe gender-linked genetic disorders. However, gender selection resulted in distortions of the natural gender ratio and inappropriate control over nonessential characteristics of children, and posed psychological burden and harm to gender selected offspring. Finally, gender selection discriminated against the birth of girls.

3. Position Statement

The current author is against gender selection. From religious and cultural background, we believe that ultimately everything happens by the Will of God. Gender selection also represents discrimination against girls. To resolve issues surrounding gender selection, the following recommendations are proposed:

1. Gender bias must be tackled at more fundamental and comprehensive social, economic, political and legal levels. Gender discrimination is unacceptable, independently of cultural, religious, political, economical or social demands.
2. When technology is used for nonmedical indications tight regulations should be implemented.
3. Prohibitions are unnecessary and oppressive when there is no gender bias.
4. Gender selection should only be offered after proper informative and implicative counseling.
5. Healthy embryos of the unwanted gender, created by PGD for gender selection, may be used in research, donated to infertile couples, or transferred to the genetic mother.
6. Centers providing gender selection must keep a balanced gender ratio within the center.
7. When health resources are limited, gender selection service may be provided in private sectors. A mechanism has to be found to enable the needy to have access to this service.

4. Summary and Conclusions

Gender selection is a controversial issue. The purpose of this position statement paper was to present opponents and proponents' viewpoints regarding gender selection. Although the current author was against gender selection, there were various benefits and harms of gender selection; these should be balanced for the benefits of both gender. Recommendations to solve issues related to gender selection were discussed.

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References

Aghajanova, L., & Valdes, C. T. (2012). Sex Selection for Nonhealth Related Reasons. Virtual Mentor, 14(2), 105.

Al-Akour, N. A., Khassawneh, M., Khader, Y., & Dahl, E. (2009). Sex preference and interest in preconception sex selection: A survey among pregnant women in the north of Jordan. Human Reproduction, 24(7), 1665-1669.

Department of Statistics. (2013). Report of the 2006 demographic and health survey. Amman: Jordan.

Dezhkam, L., Dezhkam, H., & Dezhkam, I. (2014). Sex selection from Islamic point of view. Iranian journal of reproductive medicine, 12(4), 289.

Dickens, B. M., Serour, G. I., Cook, R. J., & Qiu, R. Z. (2005). Sex selection: Treating different cases differently. International Journal of Gynecology & Obstetrics, 90(2), 171-177.

Dondorp, W., De Wert, G., Pennings, G., Shenfield, F., Devroey, P., Tarlatzis, B., & Diedrich, K. (2013). ESHRE task force on ethics and law 20: Sex selection for non-medical reasons. Human Reproduction, 28(6), 1448-1454.

Eftekhaari, T. E., Nejatizadeh, A. A., Rajaei, M., Soleimanian, S., Fallahi, S., Ghaffarzadegan, R., & Mahmoudi, F. (2015). Ethical considerations in sex selection. Journal of Education and Health Promotion, 4(1), 32.

Ethics Committee of the American Society for Reproductive Medicine. (2004). Sex selection and preimplantation genetic diagnosis. FertilSteril,82 Suppl 1, S245-248.

Gadit, A. A. (2012). Gender selection: Is there a growing trend? The Journal of the Pakistan Medical Association, 62(7), 738-739.

Ingravallo, F., Dietrich, C. F., Gilja, O. H., & Piscaglia, F. (2014). Guidelines, Clinical Practice Recommendations, Position Papers and Consensus Statements: Definition, Preparation, Role and Application. Ultraschall in der Medizin (Stuttgart, Germany: 1980), 35(5), 395-399.

Leiter, G. (2014). What Israeli policy can teach us about elective sex selection. Israel Journal of Health Policy Research, 3(1), 42.

Serour, G. I. (2004). Transcultural issues in gender selection. In International Congress Series, 1266, 21-31.

Serour, G. I., & Dickens, B. M. (2001). Assisted reproduction developments in the Islamic world. International

Journal of Gynecology & Obstetrics, 74(2), 187-193.
Sex selection. In Ethics in Obstetrics and Gynecology, Washington, DC, American College of Obstetricians and Gynecologists, 2002, p 86
Thiele, A. T., & Leier, B. (2010). Towards an ethical policy for the prevention of fetal sex selection in Canada. Journal of Obstetrics and Gynaecology Canada, 32(1), 54-57.
Wilhelm, M., Dahl, E., Alexander, H., Brähler, E., &Stöbel-Richter, Y. (2013). Ethical attitudes of German specialists in reproductive medicine and legal regulation of preimplantation sex selection in Germany. PloS One, 8(2), e56390.
World Health Organization. (2012). Gender and genetics. Available at: www.who.int/genomics/gender/en/index4.html.
World Health Organization. (2011). Preventing gender-biased sex selection. World Health Organization: Geneva. Available at: http://whqlibdoc.who.int/publications/2011/ 9789241501460_eng.pdf .
Harris, L. H., Cooper, A., Rasinski, K. A., Curlin, F. A., & Lyerly, A. D. (2011). Obstetrician–gynecologists' objections to and willingness to help patients obtain an abortion. Obstetrics and gynecology, 118(4), 905.
http://pregnancy.about.com/od/boyorgirl/p/girlorboy.htm